

# Laboratory Technology

Program A5900  
CIP 410101

## Associate in Applied Science Degree

Laboratory Technology is a career program that prepares students for immediate employment as biological or chemical technicians in governmental, industrial, or production facilities. Graduates have obtained positions at Johnson & Johnson, Exxon-Mobil, NJ Department of Health, Firmenich, Bristol-Myers Squibb, GE Astro Space Division, the NJ State Police Laboratory, FMC, Rheox Chemicals, Carter-Wallace, and elsewhere.

Opportunities are best for those who have mastered basic principles of chemistry and are proficient in laboratory skills. While employed, technicians often find opportunities for additional study leading to a baccalaureate degree. Many companies will pay for this advanced study.

Laboratory technology students may participate in cooperative education through which they can earn salaries as they earn credit and gain relevant experience. Co-op students often are offered full-time employment by their co-op employers.

Admission to the program requires a high school diploma or its equivalent with at least one year of science (biology, chemistry, or physics) and one year of algebra. Those with insufficient background may take preparatory courses at MCCC.

The successful graduate of the Laboratory Technology program is awarded an Associate in Applied Science degree and will be able to:

- maintain experimental records;
- prepare standardized solutions;
- use equipment such as electronic balances, pH meters, microscopes, autoclaves, and gas chromatographs;
- prepare microbiological media and transfer cultures;
- identify fungi and bacteria;
- conduct instrumental methods of analysis;
- conduct organic synthesis techniques;
- use the library and do literature searches;
- perform statistical calculations;
- employ good laboratory practices and observe safety procedures;
- use computers in technical applications and for data acquisition and treatment in the laboratory.

### Curriculum

Code	Course (lecture/lab hours)	Credits
ENG 101	English Composition I (3/0)	3
MAT 115	Algebra and Trigonometry I (3/0) <sup>1</sup>	3
CHE 101	General Chemistry I (3/3)	4
BIO 101	General Biology I (3/3)	4
HPE 110	Concepts of Health and Fitness (1/2)†	2
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ENG 112	English Composition II with Speech (3/0)	3
MAT 116	Algebra and Trigonometry II (3/0) <sup>1</sup>	3
CHE 102	General Chemistry II (3/3)	4
BIO 102	General Biology II (3/3)	4
COS —	Computer Science elective <sup>2</sup>	4
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BIO 201	Microbiology (3/3)	4
CHE 201	Organic Chemistry I (3/4)	5
— —	Technical electives <sup>3</sup>	4
— —	General Education elective <sup>4</sup>	3
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CHE 210	Instrumental Analysis (3/3) OR	4-5
CHE 202	Organic Chemistry II (3/4)	4
— —	Technical elective <sup>3</sup>	4
— —	General Education elective <sup>5</sup>	3
— —	General Education elective <sup>5</sup>	3
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		64-65

<sup>1</sup> MAT 146 may be substituted for MAT 115-116.

<sup>2</sup> Select from COS 101, 102.

<sup>3</sup> Select from BIO 203, 208; CHE 202, 205, 299; PHY 101, 102.

<sup>4</sup> Select course from either Social Science or Humanities general education categories.

<sup>5</sup> Select course from the following general education categories: Social Science, Humanities, Historical Perspective, Diversity and Global Perspective.

†HPE 111 is an acceptable alternative.



**NOTE:** All program listings are subject to periodic updates. Please consult your program advisor, academic division, or [www.mccc.edu/programs\\_degree](http://www.mccc.edu/programs_degree)